



Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
to respond to a collection of information unless it contains a valid OMB control number.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete if Known

Application Number	10/825,611
Filing Date	April 16, 2004
First Named Inventor	Allen HOPPER
Group Art Unit	1626
Examiner Name	Unassigned
Attorney Docket Number	MEMORY-41

(use as many sheets as necessary)

Sheet	1	of	2
-------	---	----	---

U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

**Examiner
Signature**

T. A. Solola

Date Considered

9-26-06

***EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet	2	of	2
-------	---	----	---

Complete if Known

Application Number	10/825,611
Filing Date	April 16, 2004
First Named Inventor	Allen HOPPER
Group Art Unit	1626
Examiner Name	Unassigned
Attorney Docket Number	MEMORY-41

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

[illegible]

**Examiner
Signature**

T. A. Solola

Date Considered

9-26-06

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.



Please use a plus sign (+) inside this box → ☐

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1448A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 2

Complete If Known

Application Number	10/825,611
Filing Date	April 16, 2004
First Named Inventor	Allen HOPPER
Group Art Unit	1626
Examiner Name	Unassigned
Attorney Docket Number	MEMORY-41

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
Yo	A1	5,869,516		Art et al.	2/9/1999	
	A2					
	A3					
	A4					
	A5					
	A6					
	A7					
	A8					
	A9					
	A10					
	A11					
	A12					
	A13					
	A14					

FOREIGN PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM- DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (if known)				
Yo	B1	WO	00/66562			11/9/2000		
	B2	WO	03/087062			10/23/2003		
	B3	WO	2004/007463			1/22/2004		
	B4	WO	01/40216			6/7/2001		
	B5	EP	1 251 126			10/23/2002		
	B6	WO	01/58895			8/16/2001		
	B7	WO	97/49702			12/31/1997		
	B8							
	B9							
	B10							
	B11							

Examiner
Signature

T.A. Solola

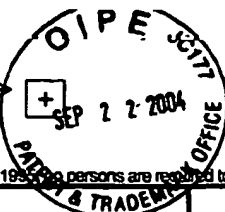
Date
Considered

9-26-06

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known

Application Number	10/825,611
Filing Date	April 16, 2004
First Named Inventor	Allen HOPPER
Group Art Unit	1626
Examiner Name	Unassigned
Attorney Docket Number	MEMORY-41

Sheet 2 of 2

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
Yo	C1	International Search Report Dated 9/13/04	+
	C2	Written Opinion of the Int'l. Searching Authority dated 4/16/04	
	C3	Database Caplus 'Online', Chemical Abstracts Service, Columbus, OH, US; XP002294352, Accession No. 1978:6818	
	C4	Database Caplus 'Online', Chemical Abstracts Service, Columbus, OH, US; XP002294353, Accession No. 125:114541	
	C5	Database Beilstein, Beilstein Institute for Organic Chemistry, Frankfurt-Main, DE; XP002294354, Accession No. BRN: 7622210	
	C6	Malcolm A. HALCROW, et al., "Metal complexes of sterically hindered pyrazolylpyridines. The single crystal X-ray structure of [Cu(L') ₂]BF ₄ (L' = 1-(pyrid-2-yl)-3-2',5'-dimethoxyphenyl)pyrazole", Polyhedron, Vol. 16, No. 24, pgs. 4257-4264, 1997.	
	C7	Japanese Patent Abstract No. 2001-039954, dated February 13, 2001	
	C8		
	C9		
	C10		
	C11		
	C12		
	C13		
	C14		
	C15		
	C16		
	C17		
	C18		
	C19		
	C20		
	C21		
	C22		

Examiner Signature

T.A. Solola

Date Considered

9-26-06

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.



Please type a plus sign (+) inside this box → ☐

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 2

Complete if Known

Application Number	10/825,611
Filing Date	April 16, 2004
First Named Inventor	Allen HOPPER
Group Art Unit	1626
Examiner Name	Unassigned
Attorney Docket Number	MEMORY-41

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
Y	A1	4,012,495		Schmiechen, et al.	03-15-1977	
	A2	4,193,926		Schmiechen, et al.	03-18-1980	
	A3	4,219,551		Seidelmann et al.	08-26-1980	
	A4	5,846,514		Foster et al.	12-08-1998	
	A5	5,539,111		Petzoldt, et al.	07-23-1996	
	A6	5,814,651		Duplantier, et al.	09-29-1998	
	A7	5,935,978		Fenton, et al.	08-10-1999	
	A8	6,136,821		Hersperger	10-24-2000	
	A9	6,258,833		Martins, et al.	07-10-2001	
	A10	6,372,777		Martins, et al.	04-16-2002	
	A11	6,334,997		Foster et al.	1-1-2002	
	A12	6,403,597		Wilson et al.	06-2002	
	A13	6,423,710		Martins, et al.	07-23-2002	
✓	A14	6,495,154		Tam, et al.	12-2002	

FOREIGN PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM- DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ³
		Office ⁴	Number ⁴	Kind Code ⁵ (if known)				
Y	B1	WO	01/68600	A2	Lauener et al.	09-20-2001		
	B2	WO	02/45749	A2	Filbin et al.	06-13-2002		
	B3	WO	92/19594		Bender et al.	11-12-1992		
	B4	WO	93/07141	A1	Bender et al.	04-15-1993		
	B5	WO	93/25517	A1	Beeley et al.	12-23-1993		
	B6	WO	94/14742	A1	Warrellow et al.	07-07-1994		
	B7	WO	95/28926	A1	Wachtel et al.	11-02-1995		
	B8	WO	95/35282		Head et al.	12-28-1995		
	B9	WO	97/25312		Schmiechen, et al.	07-17-1997		
	B10	WO	98/58901	A1	Ina et al.	12-30-1998		Abstr.
✓	B11	JP	10-72415			3-17-1998		

Examiner
Signature

T. A. Solola

Date
Considered

9-26-06

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box

+

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

2

of

2

Complete if Known

Application Number	10/825,611
Filing Date	April 16, 2004
First Named Inventor	Allen HOPPER
Group Art Unit	1626
Examiner Name	Unassigned
Attorney Docket Number	MEMORY-41

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
Yb	C1	Nagakura et al., "Effects of a phosphodiesterase IV inhibitor rolipram on microsphere embolism-induced defects in memory function and cerebral cyclic AMP signal transduction system in rats," <i>British Journal of Pharmacology</i> , (2002) 135, 1783-1793	
	C2	Keller et al., "Synthesis and Structure-Activity Relationship of N-Arylrolipram Derivatives as Inhibitors of PDE4 Isozymes," <i>Chem. Pharm. Bull.</i> , 49(8) 1009-1017 (2001)	
	C3	Martin, "PDE4 inhibitors - A review of the recent patent literature," <i>Drugs</i> , 2001 4 (3):312-338	
	C4	Wang et al., "Expression, Purification, and Characterization of Human cAMP-Specific Phosphodiesterase (PDE4) Subtypes A, B, C, and D," <i>Biochemical and Biophysical Research Communications</i> , 234, 320-324 (1997)	
	C5	Meyers et al., "The Synthesis of Aracemic 4-Substituted Pyrrolidinones and 3-Substituted Pyrrolidines. An Asymmetric Synthesis of (-)-Rolipram," <i>J. Org. Chem.</i> , 1993, 58, 36-42	
	C6	Crossland, J., "Rolipram," <i>Drugs Of The Future</i> , Vol. 13, No. 1, 1988	
	C7	Langlois et al., "Synthesis of the Novel Antidepressant (R)-(-)-Rolipram," <i>Synthetic Communications</i> , 27 (18), 3133-3144 (1997)	
	C8	Robichaud et al., "Emesis induced by inhibitors of type IV cyclic nucleotide phosphodiesterase (PDE IV) in the ferret," <i>Neuropharmacology</i> , 38 (1999) 289-297	
	C9	Houslay et al., "The Multienzyme PDE4 Cyclic Adenosine Monophosphate-Specific Phosphodiesterase Family: Intracellular Targeting, Regulation, and Selective Inhibition by Compounds Exerting Anti-inflammatory and Antidepressant Actions," <i>Advance in Pharmacology</i> , Volume 44, pp. 225-342 (1998)	
	C10	Zhang et al., "Inhibition Of Cyclic AMP Phosphodiesterase (PDE4) Reverses Memory Deficits Associated with NMDA Receptor Antagonism," <i>Neuropsychopharmacology</i> , 2000, 23, 198-204	
	C11	Zhang et al., "Effects of rolipram on scopolamine-induced impairment of working and reference memory in the radial-arm maze tests in rats," <i>Psychopharmacology DOI</i> , 10.1007/s002130000414 (2000)	
	C12	Barad et al., "Rolipram, a type IV-specific phosphodiesterase inhibitor, facilitates the establishment of long-lasting long-term potentiation, and improves memory," <i>Proc. Natl. Acad. Sci., USA</i> , Volume 95, pp. 15020-15025, December 1998	
	C13	Demnitz et al., "Enantiodivergent Synthesis of (R)- and (S)-Rolipram," <i>Molecules</i> , 1998, 3, 107-119	
	C14	Osby et al., "Rapid and Efficient Reduction of Aliphatic Nitro Compounds to Amines," <i>Tetrahedron Letters</i> , Volume 26, No. 52, pp. 6413-6416, 1985	
	C15	Kusters et al., "Influence of temperature on the enantioseparation of rolipram and structurally related racemates on Chiralcel-OD," <i>Journal of Chromatography A</i> , 737, (1996) 333-337	
	C16	Christensen et al., "1,4-Cyclohexanecarboxylates: Potent and Selective Inhibitors of Phosphodiesterase 4 for the Treatment of Asthma," <i>J. Med. Chem.</i> , 1998, 41, 821-835	
	C17	Krause et al., "Pharmacokinetics of rolipram in the rhesus and cynomolgus monkeys, the rat and the rabbit. Studies on species differences," <i>Xenobiotica</i> , 1988, Vol. 18, No. 5, 561-571	
	C18	Lourenco et al., "Characterization of R-[¹¹ C]rolipram for PET imaging for phosphodiesterase-4: in vivo binding, metabolism, and dosimetry studies in rats," <i>Nuclear Medicine and Biology</i> , 28 (2001) 347-358	
	C19	Egawa et al., "Rolipram and its optical isomers, phosphodiesterase 4 inhibitors, attenuated the scopolamine-induced impairments of learning and memory in rats," <i>Jpn J Pharmacol</i> , 1997 Nov, 75 (3): 275-81	
	C20	Schmiechen et al., "Close correlation between behavioural response and binding in vivo for inhibitors of the rolipram-sensitive phosphodiesterase," <i>Psychopharmacology</i> , (Berl) 1990; 102 (1): 17-20	
	C21	Marivet et al., "Inhibition of Cyclic Adenosine-3',5'-monophosphate Phosphodiesterase from Vascular Smooth Muscle by Rolipram Analogues," <i>J. Med. Chem.</i> , 1989, 32, 1450-1457	
✓	C22	Morgan et al., "Biochemical Pharmacology (1993)", 45(12), 2373-80, pgs 23-27, CAS Abstract Only,	

Examiner
Signature

T. A. Solola

Date
Considered

9-26-06

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.